History of the Patent Troll and Lessons Learned

By Robert H. Resis, Esq.

The activities of today’s patent trolls have attracted the serious attention of U.S. business, and for good reason. The majority of today’s patent infringement cases are filed by a patent troll—that is, one whose only “business” is to generate maximum patent licensing revenue via litigation or the threat of litigation and who has no need for a cross-license. Additionally, the Federal Circuit recently held that a patent troll was entitled to a permanent injunction on a business-method patent because there is “no reason to depart from the general rule that district courts will issue permanent injunctions against patent infringement absent exceptional circumstances.” In 2006, it is expected that the Supreme Court will decide whether the Federal Circuit is correct.

Today’s news accounts and court decisions involving patent trolls highlight the shift in the nature of the typical patent infringement suit from those filed around 20 years ago. At the start of the Federal Circuit in the early 1980s, most patent infringement suits typically involved a patent owner/exclusive licensee who was actively engaged in making and selling a patented product or a product made using a patented apparatus or method. An example of the typical infringement suit of its day is Motorola v. Hitachi, 750 F. Supp. 1319 (W.D. Tex. 1990) (holding certain products were not covered under a 1986 patent license agreement and that both parties’ patents were valid and infringed).

While there has been a dramatic percentage increase in the number of patent infringement suits brought by patent trolls, it would be incorrect to assume that today’s patent troll is a totally new phenomenon. Patent trolls have been around since the start of the U.S. patent system. Indeed, some of the most high profile inventions in the United States precipitated patent troll suits. A review of several patent troll cases involving high profile inventions provides valuable lessons for today’s patent trolls and their targets.

Eli Whitney—the First Patent Troll?

Eli Whitney’s cotton gin (short for engine) invention provided the means for production of cotton to go from one pound of cotton per day per worker to 50 pounds of cotton per day per worker. Whitney, however, did not enjoy the commercial success of his patented invention. Indeed, his company, which made the patented cotton gins, went out of business within three years of the issuance of his patent. Whitney was subsequently reduced to suing plantation owners in the South over the course of many years. As such, Whitney can be fairly identified as perhaps the first patent troll in our nation’s history, even though he started out as a manufacturer of his patented device.

Whitney had mechanical talent. For example, he made nails from a machine he built himself. Starting college late in life, Whitney graduated from Yale in 1792 at the age of 27. With no U.S. industry that suited his mechanical talents, Whitney accepted a position to tutor in South Carolina. Upon arrival, he discovered that his promised salary would be halved. Whitney refused the position and rather than return to the North, he accepted an invitation from the widow of Revolutionary general Nathaniel Greene to stay at her plantation and assist her manager, Phineas Miller.

At the Greene plantation, Whitney learned that the only variety of cotton that would grow away from a coastline was a green seed variety. Ten hours of painstaking handwork was needed to separate one pound of cotton from a few pounds of the small green seeds. Whitney set out to make a machine that would greatly increase production. He studied the hand movements of workers, and within days he built a model that separated the cotton from the seeds.

In October of 1793, after perfecting his machine, Whitney sent a drawing of his new invention to Secretary of State Thomas Jefferson in a patent application. Jefferson replied on November 16 that “the only requisite of the law now uncomplied with is the forwarding a model, which being received, your patent may be made out & delivered to your order immediately.” In February of 1794, Whitney completed the model to his satisfaction, and in March he took it to Philadelphia to demonstrate it in Jefferson’s office in order to receive his patent. The patent that Jefferson had approved November of 1793 was issued to Whitney on March 14, 1794.

By the time of patent issuance, word had spread throughout the South of Whitney’s invention. Planters were quickly planting green seed cotton in vast amounts. Whitney set up his company in the North to make his invention, and his partner, Miller, was to oversee the installation and use of and payment of royalties generated by the patented cotton gins in the South. Within a short time after Whitney’s invention in 1793, U.S. exports of cotton rose from 0.14 million pounds per year (in 1792) to 17 million pounds per year (in 1800). Whitney, however, did not enjoy the great commercial success provided by his patented cotton gin because:

• His invention was easy to copy
• His demand of one-third of the sales revenue of cotton processed using his patented cotton gin was much greater than cotton planters were willing to pay
• His company was unable to meet demand, experienced a fire, and went out of business in 1797
• He was required to file suits in the South, and Southern courts were not willing to give him speedy justice

When Congress refused to renew Whitney’s patent, which expired in 1807, Whitney concluded that “an invention can be so valuable as to be worthless to the inventor.” The money Whitney eventually received for use of his patented invention went to cover his attorney fees and other expenses, and he was penniless after
spending about 10 years in court.15

The lesson learned from Whitney’s patent experience:

**Pigs Get Fat, but Hogs Get Slaughtered.** Whitney should have been more realistic as to the money he could expect from the commercialization of his invention, given the ease of copying his invention, that his small start-up company could not meet initial demand, and that he was a lone Northerner with relatively little wealth seeking relief against Southern landowners in Southern courts. At the very least, Whitney should have considered offering to sell a minority ownership interest in his company to the most influential and powerful Southern planters, thereby giving them an interest in the successful enforcement of his patent.

**George Selden—the First Recognized Patent Troll**

George Selden (1846–1922), a patent attorney, expressly set out to be a patent troll. In 1879, Selden filed a patent application for a “road engine.” Selden purposely delayed the issuance of his patent over the next 16 years while he waited for others to develop practical automobile technology and automobile-making companies. When he felt the time was right, Selden had his patent issue in 1895. Selden then threatened suit against the automobile makers and had licensing success through his holding company, the Association of Licensed Automobile Manufacturers (see figure 1). However, there was one major holdout—Henry Ford. Ford issued its own notice to counter that of Selden (see figure 2).

Selden took Ford to court.16 The Second Circuit noted at the outset of its decision that Selden “took full advantage of the periods of inactivity permitted by the rules and statutes” and “he delayed just as long as possible the issue of the patent to him.”17

The court stated that Selden “acted within his rights,” however, and that he “merely took advantage of delays which the law permitted him.”18 As such, the court stated that Selden’s patent “must be viewed without prejudice and with absolute judicial impartiality.”19

Claim 1 of the Selden patent (U.S. Patent No. 549,160) claimed:

The combination with a road locomotive, provided with suitable running gear including a propelling wheel and steering mechanism, of a liquid hydrocarbon gas engine of the compression type, comprising one or more power cylinders, a suitable liquid-fuel receptacle, a power shaft connected with and arranged to run faster than the propelling wheel, an intermediate clutch or disconnecting device, and a suitable carriage body adapted to the conveyance of persons or goods, substantially as described.

Ford asserted the defenses of invalidity and noninfringement. The court held that Selden’s patent was valid over the prior art, which included two well-defined types of compression gas engines, that is, the two-stroke “Brayton” engine and the four-stroke “Otto” engine. In reaching this holding, the court found that “the engine Selden referred to in his patent for the completion of his description was the Brayton engine” and that “Selden made material improvements upon the Brayton structure in order to adapt to the purposes of a road vehicle.”20 Specifically, the court noted that the engine shown in Selden’s patent had an “inclosed” crank chamber, and the court “was satisfied that the use of the inclosed crank case rendered unnecessary the heavy bed of plates of the former Brayton construction and enabled the patentee to dispense with other heavy and cumbersome parts outside the case of the cylinder.”21 The court concluded:

The claim is held to be valid as covering a combination in a road locomotive of the different elements with a liquid hydrocarbon compression engine of the Brayton type; the limitation to this type being read into the claim by the specification to save it from invalidity. . . .

The complaints urge that it places too narrow a construction upon the claim to limit it to a combination of which the engine is an improved Brayton engine. They say that the improvements upon the Brayton engine which Selden shows in his patent merely illustrate the alterations and changes required by compression engines generally to fit them for the purposes of a light road vehicle. They say, in effect, that the engine element of the claim is any compression engine which has been adapted to vehicular purposes by changes similar to those made in the Brayton engine. . . .

No one could learn from the [Selden] patent whether the Otto engine could be constructed with an inclosed crank chamber, or whether the substitution of the gearing ratio shown in the drawing would increase or diminish its speed. With the patent before a person skilled in the art, experiments, certainly, and invention, not improbably, would have been necessary to determine the steps required to reorganize the Otto engine.

A patent is granted for solving a problem, not for stating one. . . . If we were to construe the claim as the complainants urge, we should be obliged to go further and hold it uncertain, indefinite, and consequently invalid.22

Turning to the question of infringement, the court found that Ford’s autos having Otto-type engines did not infringe the Selden patent, which disclosed autos having only modified Brayton-type engines:

While the conclusion of noninfringement which we have reached leaves the patentee empty handed with respect to his patent for the short time it has to run, it cannot be regarded as depriving him through any technicality of the just reward for his labors. He undoubtedly appreciated the possibilities of the motor vehicle at a time when his ideas were regarded as chimerical. Had he been able to see far enough, he might have taken out a patent for a far reaching as the Circuit Court held this one was. But, like many another inventor, while he had a conception of the object to be accomplished, he went in the wrong direction. The Brayton engine was the leading engine at the time, and his attention was naturally drawn to its supposed advantages. He chose that type. In the light of events we can see that had he appreciated the superiori of the Otto engine and adapted that type for his combination his patent would cover the modern automobile. He did not do so. He made the wrong choice, and we cannot, by placing any forced construction upon the patent or by straining the doctrine of equivalents, make another choice for him at the expense of these defendants who neither legally nor morally owe him anything.23

The lessons from the Selden case are:

1) **Don’t Accept a Troll’s Position on the Scope of the Troll’s Patent.** Selden’s “Notice” stated that his patent “controls broadly all gasoline automobiles which are accepted as commercially practical.” Selden’s failure to discuss in his patent how an Otto-type engine could be modified and incorporated into his claimed combination was fatal to his infringement case against Ford.

2) **When the Facts Are on Your Side, It Pays to Make a Stand.** Ford could have paid a license to Selden, presumably...
under the same terms that many others had agreed to pay Selden, and not been placed in a competitive disadvantage. Ford’s win served notice to future trolls that Ford would not be an easy mark.24

Alexander Graham Bell—Offer to Sell Telephone Patent Refused
In March of 1876, Bell received his patent for a communication device for “transmitting vocal or other sounds telegraphically.”25 A little-known fact is that in 1877 the owners of the Bell telephone patent offered to sell it to Western Union for $100,000.26 The response was, “What shall we do with a toy like that?”27 By the time Western Union realized its mistake and offered millions for the patent, Bell Telephone Company was in competition with Western Union and had sued Western Union for infringement. In November 1879, rather than risk losing in court, Western Union agreed to settle the infringement suit. Specifically, Western Union agreed to withdraw from the telephone business for the duration of the Bell patents and to sell its 56,000 telephones to Bell’s company. Bell’s company agreed to not enter the telegraph business and to pay Western Union 20 percent of all royalties paid under its former license contracts.28

The lessons from the Bell case are:
1) If You Don’t Innovate, Someone Else Will. Western Union failed to use its position, wealth, and opportunity to procure the services of Bell and/or others (like Meucci) to develop the telephone.
2) Don’t Immediately Pass on an Opportunity to Purchase Patent Rights without Considering the Big Picture. Western Union rejected the offer to buy Bell’s patent rights because it failed to consider the big picture. In doing so, Western Union turned a patent troll into the new telephone industry that soon superseded Western Union’s telegraph industry.

Philo T. Farnsworth—the Young Genius Who Invented Television
Philo Farnsworth (1906–71) is the epitome of the independent inventor many Americans envision. In 1921, at the age of 14, while tilling a potato field back and forth, Farnsworth conceived of an approach to make television a reality.29 Specifically, Farnsworth realized that an electron beam could scan a picture in horizontal lines.30

In 1927, at the age of 21, Farnsworth succeeded in producing the first electronic television image using an image “dissector” he had invented.31 He filed his patent application that same year.32 In 1928, he publicly demonstrated his invention. In 1929, Farnsworth eliminated all mechanical moving parts.33

In 1930, David Sarnoff, head of RCA, arranged for Vladimir Zworykin to leave Westinghouse for RCA. But before Zworykin was to move to RCA’s research facility in Camden, New Jersey, Sarnoff instructed Zworykin to visit Farnsworth’s lab in California to find out firsthand about Farnsworth’s work. Zworykin was instructed to approach Farnsworth “on his own, in his present capacity, as an engineer for Westinghouse, investigating the possibility of a patent license,” and Zworykin’s “next destination after San Francisco—Camden—was not to be discussed.” Sarnoff’s strategy in connection with television was to be the same as RCA’s successful strategy in radio. “The RCA doesn’t pay patent royalties,” Sarnoff allegedly told a colleague once, “we collect them.” When Farnsworth finished explaining the Image Dissector during Zworykin’s visit, witnesses heard Zworykin remark, “This is a beautiful instrument. I wish I’d invented it.”34

In 1931, Sarnoff himself visited Farnsworth’s lab. By this time RCA had already invested heavily to develop a television system, and Sarnoff saw that Farnsworth was well ahead of RCA. Knowing that Farnsworth was further along, Sarnoff offered to pay $100,000 for Farnsworth’s inventions.35 Farnsworth declined the offer. RCA then sought priority to the invention claimed by Farnsworth, by claiming that Zworykin’s 1923 patent application taught Farnsworth’s invention.36

In 1934, the U.S. Patent Office awarded priority of invention to Farnsworth.37 Farnsworth continued to invent, and he obtained numerous other patents relating to television. Further, after beating RCA in the Patent Office, Farnsworth agreed to cross-license patents with AT&T, which had developed “coaxial cable” for wiring together television networks.38 Finally, in 1939, RCA agreed to pay royalties of $1 million to Farnsworth’s company for a nonexclusive license.39

The lesson from the Farnsworth case is: Patent Trolls Need to Continue to Innovate. Farnsworth did not sit back after his first invention in 1927. In doing so, he beat RCA to the punch as RCA tried to catch up and pass Farnsworth’s basic invention. This placed Farnsworth in a stronger negotiating position years after he obtained his basic patent.

Conclusion
History shows that patent trolls should not be summarily dismissed as those who do not contribute anything to society. Some inventors are reduced to becoming trolls (e.g., Whitney). Some inventors start out as trolls and become competitors when others refuse to pay a relatively small sum for patent rights (e.g., Bell became Western Union’s competitor). Some inventors beat well-funded research labs (e.g., Farnsworth beat RCA’s lab).

History also shows that corporations should not accept a troll’s position on patent breadth, and they should take a stand when the facts are on their side (e.g., Ford’s challenge against Selden). History shows that corporations that consider the big picture and innovate reduce the risks posed by patent trolls.

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Endnotes
1See Aggressive Patent Litigants Pose Growing Threat to Big Business, WALL ST. J., Sept. 14, 2005, at A1, col. 5. This article notes, among other things, “Lured by the potential returns, hedge funds and other institutional investors are now bankrolling businesses that buy up patent portfolios, and ‘[m]ore law firms . . . are taking patent cases on a contingency fee basis.’” The same article states, “Critics call the small litigants ‘patent trolls’ and say they are parasites on successful businesses. We finally built it up to where we started to make money at it, and the patent troll industry came along and said, ‘We want a piece of that,’” says Paul Tobin, the 62-year-old founder and chairman of Boston Communications. ‘No one comes after you until it all works. They don’t go after the failures.’”
2 In 2004, 83 percent of nonchemical patent litigation cases filed against large companies were filed by patent trolls. IPO, Patent “Trolls” and Intellectual Property Rights Conference in Washington, D.C., Mar. 14, 2005, David Simon, Intel (informal survey). This is up from 74.2 percent in 2003 and 59.7 percent in 2002, i.e., a 28 percent increase in three years.
patent. Whitney gave the South the technology to enjoy cotton’s riches, and he later gave the North the technology to win the Civil War. Eli Whitney Museum, http://www.eliwhitney.org/cotton.htm.

See Columbia Motor Car Co. et al. v. C.A. Duerr & Co. et al., 184 F. 893 (2d Cir. 1911).

17 184 F. at 894.
18 184 F. at 895.
19 Id.
20 184 F. at 906.
21 184 F. at 907.
22 184 F. at 908–09 (footnote omitted).
23 184 F. at 915–16 (emphasis added).

An example of Ford’s continued stance against patent trolls is exemplified in Kearns v. Ford (wherein Kearns sought $325 million against Ford for a patented intermittent windshield wiper system). Kearns was unsuccessful in his attempt to get Ford to set him up as the supplier of windshield wiper systems to the auto industry, and after 13 years of litigation, he only received a jury award against Ford of about $10 million before taxes and attorney fees. Matt Schudel, Accomplished, Frustrated Inventor Dies, WASH. POST, Feb. 26, 2005, http://www.washingtonpost.com/wp-dyn/articles/A54564-2005Feb25.html.

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26 Wikipedia, AT&T, http://en.wikipedia.org/wiki/AT%26T. Bell himself only owned 10 shares of the 5,000 shares of the Bell Telephone Company. The majority of shares were owned by his two financiers, Gardiner Hubbard (a lawyer who was also Bell’s father-in-law) and Thomas Sanders, and by Bell’s wife, Mabel (nee Hubbard) Gardiner, who presumably received those shares from her father. Charles L. Brown, The Bell System, http://www.bellsystemmemorial.com/doc/the_bell_system.doc.


There is speculation that Bell’s company agreed to pay Western Union the 20 percent royalty partly in exchange for Western Union’s cooperation in keeping certain prior artwork of Antonio Meucci’s from seeing the light of day. In 1872, Meucci (an Italian immigrant) provided Western Union with materials on his telephone, and when he asked for their return in 1874, he was told they had been “lost.”


In 1885, the U.S. sued Bell to cancel the basic Bell patent based on the work of others, including Meucci. However, this suit died shortly after Meucci died. Basilio Catania, The United States Government vs. Alexander Graham Bell, http://www.esanet.it/chez_basilio/us_bell.htm. In 2001, the U.S. House of Representatives declared that Meucci was the inventor of the telephone, not Bell. See House Implies Bell Was Phony Inventor; Congress: A Long-Forgetten Immigrant Wins Recognition for the Invention Credited to Bell, http://www.press enterprise/newarchive/2002/07/01/1025499131.html.


37 Id.

NOTICE
To Manufacturers, Dealers, Importers, Agents, and Users of Gasoline Automobiles

United States Letters Patent, No. 549,160, granted to George B. Selden, Nov. 5, 1895, controls broadly all gasoline automobiles which are accepted as commercially practical. Licences under this patent have been secured from the owners by the following-named manufacturers and importers:

**Electric Vehicle Co.**
**The Winton Motor Carriage Co.**
**Packard Motor Car Co.**
**Olds Motor Co.**
**Knox Automobile Co.**
**The Haynes-Apperson Co.**
**The Autocar Co.**
**The George N. Pierce Co.**
**Apperson Bros. Automobile Co.**
**Seashirt Automobile Co.**
**Locomobile Co. of America**
**The Peerless Motor Car Co.**
**U.S. Long Distance Auto Co.**
**Waltham Mfg. Co.**

**Pope Motor Car Co.**
**The J. Stevens Arms & Tool Co.**
**H. H. Franklin Mfg. Co.**
**Charron, Girardot & Voight Co. of America (Smith & Mabley)**
**The Commercial Motor Co.**
**Berg Automobile Co.**
**Cadillac Automobile Co.**
**Northern Mfg. Co.**
**Pope-Robinson Co.**
**The Kirk Mfg. Co.**
**Elmore Mfg. Co.**
**E. R. Thomas Motor Co.**
**Buffalo Gasolene Motor Co.**

The F. B. Stearns Co.

These manufacturers are pioneers in this industry, and have commercialized the gasoline vehicle by many years of development and at great cost. They are owners of upward of four hundred United States Patents, covering many of the most important improvements and details of manufacture. Both the basic Selden patent and all other patents owned as aforesaid will be enforced against all infringers.

No other manufacturers or importers are authorized to make or sell gasoline automobiles, and any person making, selling, or using such machines made or sold by any unlicensed manufacturer or importers, will be liable to prosecution for infringement.

Association of Licensed Automobile Mfrs.
7 East 42D Street, New York
NOTICE

To Dealers, Importers, Agents, and Users of Gasoline Automobiles

We will protect you against any prosecution for alleged infringements of patents. Regarding alleged infringement of the Selden patent, we beg to quote the well-known Patent Attorneys, Messrs. Parker & Burton: "The Selden patent is not a broad one, and if it was, it is anticipated. It does not cover a practicable machine, no practicable machine can be made from it, and never was, so far as we can ascertain. It relates to that form of carriage called a FORE CARRIAGE. None of that type have ever been in use; all have been failures." "No court in the United States has ever decided in favor of the patent on the merits of the case; all it has ever done was to record a prior agreement between the parties."

We are the pioneers of the GASOLINE AUTOMOBILE. Our Mr. Ford made the first Gasoline Automobile in Detroit, and the third in the United States. His machine, built in 1893, two years prior to the issue of the Selden patents Nov. 5, 1895, is still in use. Our Mr. Ford also built the famous "999" Gasoline Automobile, which was driven by Barney Oldfield in New York on July 25th, 1903, a mile in 55 4-5 seconds, on a circular track, which is the world's record.

Mr. Ford, driving his own machine, beat Mr. Winton at Grosse Pointe track in 1901. We have always been winners.

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688-692 Mack Ave., Detroit, Mich.
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Figure 2